

**Amendment and Response Under 37 C.F.R. § 1.114**

Applicant: E. Scott Hagermoser et al.

Serial No.: 10/658,490

Filed: September 8, 2003

Docket No.: 59004US002

Title: VEHICLE TOUCH INPUT DEVICE AND METHODS OF MAKING SAME

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**REMARKS**

This communication is responsive to the Advisory Action mailed December 12, 2007. In the Advisory Action, the rejections to the claims were maintained as set forth in the Final Office Action mailed on September 25, 2007. In particular, claims 1-11, 13-23, and 27-38 were rejected under 35 U.S.C. § 103(a) as unpatentable over Gillespie et al., U.S. Patent No. 7,109,978 ("Gillespie") and Pryor, U.S. Patent No. 7,084,859 ("Pryor"), and further in view of Neuman et al., U.S. Patent No. 5,942,814 ("Neuman"); claim 12 was rejected under 35 U.S.C. § 103(a) as unpatentable over Gillespie, Pryor, Neuman, and further in view of Nagasaka, U.S. Patent Publication No. US2004/0195031 ("Nagasaka"); and claims 24-26 were rejected under 35 U.S.C. § 103(a) as unpatentable over Gillespie, Pryor, and Neuman and further in view of Reighard et al., U.S. Patent No. 5,432,569 ("Reighard").

This Response is filed concurrently with a Request for Continued Examination, in which claims 17-22 have been cancelled, claims 1, 23, and 28 have been amended, and claims 39-41 are newly presented. Claims 1-16 and 23-41 remain pending in the application and are presented for consideration and allowance.

**Claim Rejections Under 35 U.S.C. § 103**

Independent claims 1, 23, and 28 were rejected under 35 U.S.C. § 103(a) as unpatentable over Gillespie and Pryor and further in view of Neuman, and certain of the dependent claims were rejected under 35 U.S.C. § 103(a) as unpatentable over the tertiary references identified above.

The independent claims have been amended to require a capacitive touch sensor disposed between a surface and an airbag cover, the touch sensor adapted for connecting to a controller than uses signals generated by the capacitive coupling to interact with one of radio controls, a heads up display, a heating/cooling blower, a navigation system, and a hands-free phone of the vehicle.

The Final Office Action concedes at page 8 that Gillespie as modified by Pryor and Neuman does not disclose radio controls, heads up display, heating/cooling lowers, a

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navigational system, or a hands-free phone. However, the Examiner takes "official notice" that it is well known in the art to use an electronic instrument panel to provide controls for car accessories. We respectfully disagree.

It is believed that the Examiner's statement for the rejection of claims is in error. For example, each of independent claims 1, 23, and 28 requires a capacitive touch sensor disposed behind a surface in a vehicle, where the surface allows capacitive coupling between a touch and the touch sensor through the surface, and further where **the touch sensor is adapted for connecting to a controller that uses signals generated by the capacitive coupling** to interact with radio controls, heads up display, heating/cooling lower, navigation system, or a hands-free phone of the vehicle. The required limitations of the pending amended independent claims are patentably distinct from the purported disclosure of "an electronic instrument panel (employed) to provide controls for car accessories" as asserted by the Examiner to be well known in the art. In particular, it is believed that the basis of the rejections advanced by the Examiner at page 8 of the Final Office Action fails to account for all limitations in the independent claim. Consequently, the position taken in the Final Office Action is in error.

In addition, the Examiner takes official notice that is well known in the art to use electronic instrument panels in order to provide controls for car accessories. Official Notice unsupported by documentary evidence should only be taken by the Examiner where the facts asserted to be well known, or to be common knowledge in the art, are capable of instant and unquestionable demonstration as being well known. Facts asserted by the Examiner to be well known must be "capable of such instant and unquestionable demonstration as to defy dispute." *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 USPQ 6 (CCPA 1961)). We believe that the cited references fail to teach or suggest at least the limitation of a **touch sensor adapted for connecting to a controller that uses signals generated by capacitive coupling** to interact with radio controls, heads up display, heating/cooling lower, navigation system, or a hands-free phone of the vehicle. There is no basis for the Examiner to assert that these limitations are common in the art, and they are certainly not "capable of such instant and unquestionable demonstration as to defy dispute."

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In addition, if Official Notice is taken of a fact, unsupported by documentary evidence, the technical line of reasoning to take such Notice must be clear and unmistakable. MPEP § 2144.03B. The Examiner has offered no technical line of reasoning in support for the Official Notice taken. Thus, Applicant challenges the Examiner's assertions as not properly Officially Noticed. MPEP §2144.03C.

It is believed that amended independent claims 1, 23, and 28 recite patentably subject matter that is not taught or suggested by the cited references. Dependent claims 2-16, 36, and 39-40 further define amended independent claim 1; dependent claims 24-27 further define patentably distinct amended independent claim 23; and dependent claims 29-35 and 37-38 further define patentably distinct amended independent claim 28. It is believed that the independent claims are non-obvious over the cited references such that the dependent claims are also non-obvious.

The Final Office Action takes the position at page 7 that claims 10 and 11 include limitations not taught or suggested by the cited references. However, the Examiner takes the position that Applicants have failed to disclose that the limitations of claims 10 and 11 provide an advantage, are used for a particular purpose, or solves a problem. The Examiner takes the position that these limitations are an obvious matter of design choice. We respectfully disagree.

Claim 10 is directed to a quadrant segmented sensor and claim 11 is directed to a scroll bar sensor. The specification (at page 4, line 22 to page 5, line 10) teaches the advantages of these sensors in the context of an off-display capacitive touch sensor configured to be embedded or otherwise disposed behind a surface in an automobile. Additional advantages and particular uses that solve issues related to vehicle input devices are disposed in the specification at page 7, lines 3-15 and page 8, lines 4-15. Based on the disclosure in the specification, Applicant's position is that claims 10 and 11 are not rendered obvious as an obvious matter of design choice. For this additional reason, it is respectfully requested that the rejections to 10 and 11 under 35 U.S.C. §103(a) over Gillespie and Pryor and further in view of Neuman be withdrawn.

Based on the above, it is respectfully requested that the rejections to the claims under 35 U.S.C. § 103(a) as unpatentable over Gillespie and Pryor and further in view of Neuman be withdrawn.

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**New Claims**

Claims 39 and 40 are newly presented to particularly point out and distinctly claim subject matter that is not taught or suggested by the cited references. Claim 39 depends from claim 11 and requires an analog slider scroll bar touch sensor, and claim 40 depends from claim 11 and requires that the scroll bar touch sensor include a set of discreet sensor pads. Support for these limitations is located in the specification at least at page 9, lines 18-29. For at least the reasons given immediately above, it is believed that claims 39 and 40 recite additional patentably distinct subject matter over the cited references.

Claim 41 is newly presented and requires a touch input device including an airbag cover and a capacitive touch sensor disposed between an airbag and the airbag cover, where the touch sensor is one of a quadrant segmented touch sensor and a scroll bar touch sensor. Based at least in part on the arguments above, it is believed that none of the cited references teach or suggest a capacitive touch sensor including one of a quadrant segmented touch sensor and a scroll bar touch sensor as required by newly presented claim 41.

**Conclusion**

It is believed that pending claims 1-16 and 23-41 are in form for allowance, recite patentable subject matter, and are not taught or suggested by the cited references. Allowance of claims 1-16 and 23-41 is respectfully requested.

Charges of \$810.00 under 37 CFR 1.17(c) for a Request for Continued Examination fee are being paid with the concurrently filed PTO/S/30EFS Form. Charges of \$120 under 37 CFR 1.17(a)(1) for an extension fee within the first month is authorized with this Response from Deposit Account Number 500471. If other fees are required, the patent office is hereby authorized to charge Deposit Account Number 500471.

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Any inquiry regarding this Amendment and Response should be directed to Steven Bern at Telephone No. (651) 733-2255 or Nick Baumann at Telephone No. (612) 573-0669. In addition, all correspondence should continue to be directed to the following address:

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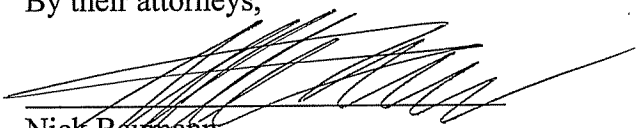
Respectfully submitted,

E. Scott Hagermoser et al.,

By their attorneys,

Date: January 14, 2008

NRB:cms

  
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Nick Baumann  
Reg. No. 56,161